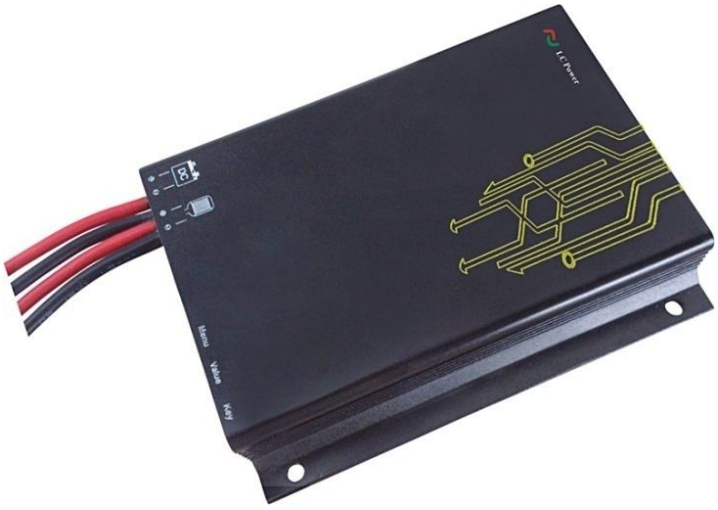
LC POWER

USER MANUAL

LCLD-B1/B2

Dimmable LED Street Light Driver



20120314 **VERSION 1**

1 Main features

1.1 Professional LED driver chip, with little current ripple, effectively extend the life of the LED lights。

1.2 Smart soft start device can decrease impact to the LED lamp and constant current source when the system power on.

1.3 Boost circuit topology, the maximum efficiency can reach to 96%, can drive up to 20 series lamp beads.

1.4 IP68 protect level（1.5m water depth, 72 hours）

1.5 Perfect protection functions,(reverse polarity, LED open circuit, short-circuit protection).

1.6 Imported high quality components contributing to high reliability.

1.7 Adopting the ceramic Capacitors can make it normal work in a long time and high temperature.

1.8 Small size, easy to use.

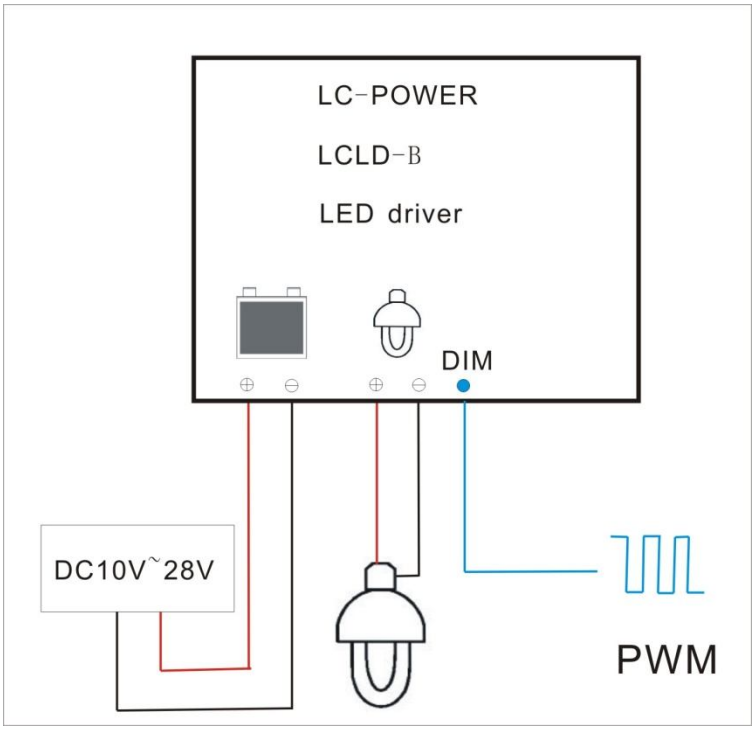
2 Installation and wiring

2.1 Load output voltage may exceed the human body safe voltage. Make sure connect LED lights before open the load.

2.2 The driver should be installed in a good ventilation place for heat dissipation.

2.3 Constant flow source start to work immediately when the power- on. To prevent the LED open circuit, please connect the LED load firstly, and connect the input power secondly.

Wiring diagram:



3 LED load connection

3.1 LED lamp used should meet the following standards: LCLD-B1/B2 built-in boost constant current power, the max. output voltage up to 70V and can drive 20 LED lamp beads.

3.2 LCLD-B1/B2 constant current power series with boost structure; make sure that the LED lamp series number within the range of the constant current power, to ensure that the input voltage less than total voltage of LED string lights.

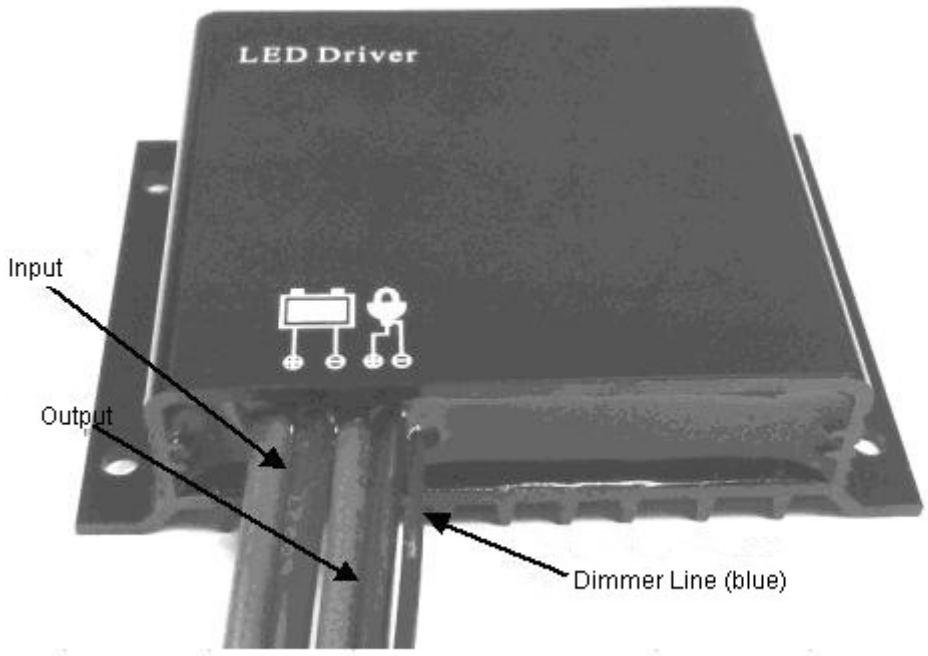
Commonly used in 12V and 24V power input recommended number of light strings as table below:

	12V	24V
LED driver output voltage	16v-70v	32v-70v
Recommend number of led series	5-20pcs	10-20pcs
LED load maximum power	B1:30w, B2:60w	B1:60w, B2:120w

Warning:

** LED load or constant current power may be damaged if the LED series Qty. is incorrect.*

** The high voltage may get the LED damaged if connect the reverse polarity, pay attention please.*



4. Dimming interface definition

The constant current power dimming is controlled by an external PWM signal, the recommended dimming frequency is 250Hz. The PWM control signal is a negative logic control: low electrical level output, high off. If let the constant current power working in a 25% of power state, the PWM control terminal signal high electrical level duty cycle should be 75% .

Parameters	Minimum Value	Typical Value	Maximum Value
PWM low	-	-	0.7v
PWM high	2v	-	28v
PWM input impedance	20KΩ	-	-

5. Specification

Note: The information before and after the slash"/" are respectively corresponding to 12 V and 24 V systems.

MODEL	LCLD-B1	LCLD-B2
Input Voltage	10V-28V	
Maximum output power	30W/60W	60W/120W
Output current	300mA-3300mA	300mA-4600mA
No-load loss	7mA	
constant current power efficiency	91%~96%	
Current Accuracy	±5%	
Open circuit voltage of load	<70V	
Dimming frequency	250Hz ± 20Hz	
Operating temperature	-40℃~+60℃	
Protection class	IP68	
Weight	150g	310g
Product size	82*59*20mm	82*95*20mm
Mounting dimensions	75*43mm	75*85mm

SUBJECT TO CHANGE WITHOUT NOTICE
VERSION 20130301
MADE IN CHINA
SHENZHEN LICHUANG POWER CO., LTD